

Class II-L Rule Clarification

Current ASP rule identifies two types of Class II watercourses:

1. Class II Standard
 - a. Fish always or seasonally present offsite w/in 1000 feet downstream, and/or
 - b. Provides aquatic habitat for nonfish aquatic species, and
 - c. Does not meet definition of Class II-L watercourse.

2. Class II Large
 - a. Can supply water and nutrients to Class I during the month of July
 - b. Can supply coarse and fine sediment to Class I
 - c. May be able to supply wood of a size that would function as large wood for the Class I watercourse (may = possibility exists)
 - i. Recruitment, delivery, and retention of large wood in Class II-L watercourses are also critical to increase sediment storage and decrease rate of sediment transport to fish-bearing Class I watercourses.

Premise for Rule Clarification:

1. BOF meant 'large' when it said 'large'. It's not just presence of a little mid-summer flow (i.e. a trickle) that triggers the scientific-premised need for expanded protection measures... Stream size and related values (i.e. increase in exposed wet surface area during summer time, amount of sediment production, necessity of larger wood to stabilize, control, and/or otherwise manipulate sediment loads for increased habitat complexity, possibility of large wood contribution to fish-bearing streams) all matter when it comes to rationale for why larger wood (Rx - retention of 13 largest trees/ac), greater canopy retention (Rx – 30' no harvest core zone; 70-80% outer band retention minimum), and wider buffers (Rx – 100' standard v. variable) are appropriate and necessary.
2. There is currently disagreement between agency staff, the BOF, landowners, and RPFs when it comes to determining Class II-L designation. Much of this appears to stem from current rule language, combined with the current (non-regulatory) ASP Rules interpretive Q&A guidelines provided jointly by CDF and DFG. The need for interpretive guidelines suggests there may be something unclear about the language.

3. Current rule (916.9 (g)(1)(E) clearly states that the Class II-L protection measures shall be implemented “...for a distance of 1,000 feet, or total length of Class II-L, whichever is less...”, while the Department is currently enforcing this rule to the contrary.

Objectives of Rule Clarification:

1. Recognize that the science in support of specified Class II-L protection measures originates from holistic consideration of processes and values associated with these larger watercourses
2. Recognize flow regime, particularly peak flow, determines the size and volume of sediment transported to a Class I water, and that channel dimensions (morphology) correlate to and reflect flow regime
3. Recognize flow regime and channel dimensions determine the potential for large wood transport downstream Class I waters; and also indicate the size of wood necessary for retention within a subject Class II for the benefit of sediment storage, sorting, and routing
4. Recognize that channel width often correlates with exposed wetted surface area, which determines direct solar heating potential when surface flows are present
5. Establish objective metrics, making rule implementation easier for both practitioner and regulator (DFG comment at BOF mtg)

Points of Clarification:

1. **2nd Order and greater Class II watercourses;** 1st Order Class II watercourses cannot be Class II L regardless of whether flow exists July on (despite what the ASP Rule guidelines currently suggest), they are too small
 - a. This falls within the two-tiered element originally presented: scoping for potential Class II-L and field verification within this identified population; if office-based scoping is irrelevant, why include this approach?
 - b. Also note that the Strahler Stream Order is based on perennial streams, and thus Class III watercourses don't count, but we'll let that sleeping dog lie...
2. **Can supply coarse sediment** – Wentworth Grade Scale (1922) recognizes this as >16mm (0.64 inch); originally proposed 1 inch based on DFG restoration manual size give for identification of coarse gravel...
 - a. Objective observation – is coarse sediment present and reasonably distributed throughout the channel within 200 feet of confluence with Class I watercourse?

- i. Defined as gravels >.64 – 5 inches in diameter

3. May be able to supply large wood (possibility exists)

- a. Minimum LWD size based on DFG Restoration Manual = 12" diameter x 6' length
 - b. Channel dimensions: > 6' wide bankful width and >1' deep bankful depth based on average channel dimension measured within 200' of Class I/II confluence
4. CAL-FIRE Dominant **Surface Flow** proposal (>75%) at least within 200' of confluence, or some element of this component when considering the relationship between temperature and need for increased shade canopy
5. CAL-FIRE/DFG ASP Rule Interpretative Q&A – more holistic consideration to meet definition and intent of Class II-L rule
6. **1000 or extent of Class II...**

Other considerations re: Rule clarification includes:

- 1. ASP Rules provide Class II-S with a 15' No Cut adjacent the watercourse for the benefit of shade canopy, nutrient fall, LWD recruitment, and disturbance minimization
- 2. Class II Standard watercourses protection measures provided for managed riparian areas consistent with 916.9 (c)(5):
 - a. Promotes increased tree growth for the benefit of larger riparian forests sooner, important considering diminished size is a lingering effect from the 20th century; provides for a mix of conifer and hardwoods; can reduce fire hazard
 - b. Allows for some minor light penetration, beneficial to MBI; no evidence or findings to suggest that these canopy retention measures including the ASP rule 15' no-harvest core zone are not adequate to prevent increase in standard Class II stream temps; Any shade reduction is temporal as these canopies fill back in; angular canopy density important to shade production, always tracks higher than total canopy cover.
 - c. Light harvest may increase flows slightly for a few years, beneficial to aquatic habitat and MBI; overstocking of riparian forest has been documented as hydrologic sink leading to reduced river flows
- 3. Mgmt-related sediment routing through riparian zones was not identified as an issue by CDF and multi-agency hillslope monitoring, thus extended WLPZ buffers for this purpose do not appear to be supported by literature or contemporary monitoring results